<u>YEIAPVFV</u>LMEQITLKKMREIVGWSSKDGDGIFSPGGAISNMYSIMAARYKF<u>FPEVKTKG</u> feline (from cDNA) <u>YEIAPVFV</u>LLEYV-----REIIGWPGGS-DGIFSPGGAISN-YAMLIARYKM<u>FPEVKEKG</u> rat (from peptide)

Figure 1



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CAGAGAGCGGCGGGAGCGTGACCTCGCGGGCCGCCACTCGGAAGGTCGCCTGCACCTGTG
GGGCGTGCGGGGTCGAGCCGAAGCAGCTTGCCCGCAGCCACTCGGAGGCGACCAGCGCCA
                                                                              SACTAGCAGAACCCATGGCATCTCCGGGCTCTGGCTTTTGGTCCTTCGGATCTGAAGATG
                                                                                                                                                                                                                                       ACCAAAAACCCTGCAGCTGCCCCAAAGGAGATGTCAATTATGCACTTCTCCACGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCTGCTGCCAGCCTGTGAAGGAGAAAGGCCCACTCTCGCATTTCTGCAAGATGTAATGA
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                                                                                                                                                           GCTCTGGGGATCCTGAGAACCCGGGAACAGCGAGAGCCTGGTGCCAGGTGGCCCAAAAGT
                                                                                                                                                                                                                                                                                         S G G S V T S R A A T R K V A C T C
                                                                                                                                S G D P E N P G T A R A W C Q V A Q K
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GCGATTAAAACAGGGCATC 590 G L A A D W L GGATTAGCAGCAGATTGGT	650	A P V F V L L GCCCCTGTATTTGTACTAC	710	G W P G G S G D	TGGCCAGGAGGCTCTGGCG	770	A M L I A R Y	GCCATGCTCATTGCCCGCT	830	V P R L I A F	GTGCCCAGGCTCATCGCAT	890	A A L G I G T	GCAGCCTTGGGGATCGGAA	950	M I P S D L E	ATGATCCCATCTGACCTTG	1010	F L V S A T A	TTCCTGGTGAGTGCCACAG	1070	V A D I C K K	
TGGAGGAAATTTTGACGCACTGCCAAACTCTAAAATATGCGATTAAAACAGGGCATC 550 570 570 550 E S T G L D M V G L A A D W L CCCGATATTAATCAGCTGTCTACCGGATTGGATATGGTTAGCAGTTAGCAGCAGATTGGT	610 630	\sim	670 690	V T L K K M R E I I G W	TGGAATATGTGACACTAAAGAAAATGAGGGAAATCATTGGCTGGC	730 750	F S P G G A I S N M Y A	ATGGAATCTTTTCTCCTGGTGGTGCCATCTCCAACATGTACGCCATGCTCATTGCCCGCT	790 810	F P E V K E K G M A A V	ATAAGATGTTTCCAGAAGTCAAGGAAAAGGGGATGGCGGCGGTGCCCAGGCTCATCGCAT	850 870	E H S H F S L K K G A A	TCACGTCAGAGCATAGTCACTTTTCTCTCAAGAAGGGAGCTGCAGCCTTGGGGATCGGAA	910 930	SVILIKCDERGKM	CAGACAGCGTGATTCTGATTAAATGTGATGAGAGAGGGAAAATGATCCCATCTGACCTTG	940 970	LEVKQKGFVPF	AAAGAAGAATCCTTGAAGTCAAACAGAAAGGATTTGTTCCTTTCCTGGTGAGTGCCACAG	30 1050	TVYGAFDPLLAV	Figure 2B
TGGAGGAA 5 R Y CCCGATAT	9	T S T TGACATCA	9	Ж	TGGAATAT	7	H D	ATGGAATC	7	X	ATAAGATG	80	E S	TCACGTCA	σ	S Q	CAGACAGC	σ	R R I	AAAGAAGA	1030	r H	

CTGGAACCACTGTGTACGGGGCTTTTGATCCTCTCTTGGCTGTAGCTGACATCTGCAAAA 1090	W G G G L	AATATAAGATCTGGATGCATGCTGCTTGGGGTGGAGGGTTACTGATGTCTCGGA 1150	F N S N A A A A D N I X	TGTGGAGAGGGCCAACTCTGTGACATGGAATCCCCA	1210 1230 1250	M G V P L Q C S A L L V R E E G L M Q	AGATGATGGGTGTCCCCTTGCAATGTTCGGCTCTCCTGGTCAGAGAGGAGGACTGATGC	1270 1290 1310	C N Q M H A S Y L F Q Q D K H Y D L S	TT	1330 1350 1370	D T G D K A L Q C G R H V D V F K L W	CCTATGACACGGGAGACAAGGCCTTGCAGTGTGGACGCCACGTCGATGTCTTTAAATTAT	1390 1410 1430	M W R A K G T T G F E A H I D K C L E	GGCTCATGTGGAGAGAAAGGGGACTACTGGATTTGAAGCTCACATTGATAAGTGTTTGG	1450 1470 1490	A E Y L Y N I I K N R E G Y E M V F D	AGCTGGCAGAGTATTTATACAATATCATTAAAAACCGAGAAGGATATGAAATGGTGTTCG	1510 1530 1550	KPQHTNVCFWFVPPSLRVL	TCAGCACACAAATGTCTGCTTCTGGTTTGTACCTCC	1570 1590 1610	DNEERMSRLSKVAPVIKAR	Figure 2C
CTGGAACCACT	Y K I	AATATAAGAT(1150	НК	AACACAAGTG	1210	M M G	AGATGATGGG	1270	S C N	AGAGCTGCAA	1330	Y D T	CCTATGACAC	1390		GGCTCATGTG	1450	L A E	AGCTGGCAGA	1510	G K P	ATGGGAAGCC	1570		

TGGAAGACAATGAAGAGAATGAGCCGCCTCTCAAAGGTGGCGCCAGTGATTAAAGCCA	M M E Y G T T M V S Y Q P L G D K V N F	GAATGATGGAGTATGGGACCACAATGGTCAGCTACCAACCCTTAGGAGATAAGGTCAACT	1690 1710 1730	FRMVISNPAATHQDIDFLIE	TCTTCCGCATGGTCATCTCAAACCCTGCAGCAACTCACCAAGACATTGACTTCCTCATTG	1750 1770 1790	EIERLGODL*	AAGAAATCGAACGCCTGGGACAAGATTTGTAATCACTTTGCTCACCAAACTTTCAGTTCT	1810 1830 1850	CTAGGTAGACAGCTAAGTTGTCACAAACTGTGTAATGTATTTTGTAGTTTCCAGAGT	1870 1890 1910	AATTCTATTTCTATATCGTGGTGTCACAGTAGAGTCCAGTTTAAAA	1930
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Figure 2D

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AGCTCGCCCGCAGCTCGCACTCGCAGGCGACCTGCTCCAGTCTCCAAAGCCGATGGCATC
                                                                                                                ICCGGGCTCTGGCTTTTGGTCTTTCGGGTCGGAAGATGGCTCTGGGGATTCCGAGAATCC
                                                                                                                                                                                                                             ACTGTGCGCCCTGCTCTACGGAGACGCCGAGAAGCCGGCGGAGAGCGGCGGGAGAGCCAACC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ERPTLAFLODVMNILLOYVV
                                                                                                                                                                                                                                                                                                   L C A L L Y G D A E K P A E S G G S Q
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0 510 530	L K Y A I K T G H P R Y F CTAAAATATGCAATTAAAACAGGGCATCCTAGATACT	0/5	D M V G L A A D W L T S T A N T N	PACTGGTTTGGATATGGTTGGATTAGCAGCAGACTGGCTGACATCAACAGCAAATACTAA	0 630 650	Y E I A P V F V L L E Y V T L K K	TGCTCCAGTATTTGT	0 690 710	I I G W P G G S G D G I F S P G G	AATGAGAGAAATCATTGGCTGGCCAGGGGGCTCTGGCGATGGGGATATTTTCTCCCGGTGG	0 750 770	N M Y A M M I A R F K M F P E V K	CGCCATATCTAACATGTATGCCATGATGATCGCACGCTTTAAGATGTTCCCAGAAGTCAA	0 810 830	M A A L P R L I A F T S E H S H F	GGAGAAAGGAATGGCTGCTCTTCCCAGGCTCATTGCCTTCACGTCTGAACATAGTCATTT	0 870 890	K G A A A L G I G T D S V I L I K	TTCTCTCAAGAAGGGAGCTGCAGCCTTAGGGATTGGAACAGACAG	0 930 950	RGKMIPSDLERRILEAK	AGAGGGAAAATGATTCCATCTGATCTTGAAAGAAGG	0 990 1010	FVPFLVSATAGTTVYGA	Figure 3B	
490	Q T T L K CCAAACAACTCTAAAA	250	T G L D M	TACTGGTTTGGATATG	610		CATGTTCACCTATGAA	670		AATGAGAGAAATCATT	730	A I S N M Y	CGCCATATCTAACATG	790		GGAGAAAGGAATGGCT	850		TTCTCTCAAGAAGGGA	910	ט	ATGTGATGAGAGAGGG	970	>		

ACAGAAAGGGTTTGTTCCTTTCGTGAGTGCCAGGCTGGAACCACCGTGTACGGAGGGGGGGG
GACTACCGGGTTTGAAGCGCATGTTGATAATGTTTGGAGTTGCCAGAGTATTTATACAA 1450 1470
N R E G Y E M V F D G K AACCGAGAAGGATATGAGGAAG
1510 1530 1550

Figure 3C

Y I P P S L R T L E D N E E R M	TGTCTGCTTCTGGTACATTCCTCCAAGCTTGCGTACTCTGGAAGACAATGAAGAGAGAAT 1570	K A R M M	GAGTCGCCTCTCGAAGGTGGCTCCAGTGATTAAAGCCAGAATGATGGAGTATGGAACCAC	1650 1670	S Y Q P L G D K V N F F R M V I S N	AATGGTCAGCTACCAACCCTTGGGAGACAAGGTCAATTTCTTCCGCATGGTCATCTCAAA	1710 1730	A T H Q D I D F L I E E I E R L G Q	CCCAGCGGCAACTCACCAAGACATTGACTTCCTGATTGAAGAAATAGAACGCCTTGGACA	1770 1790		AGATTTATAATAACCTTGCTCACCAAGCTGTTCCACTTCTCTAGGTAGACAATTAAGTTG	1830 1850	TCACAAACTGTGTGAATGTATTTGTAGTTTGTTCCAAAGTAAATCTATTTCTATTGTG	1890 1910	GTGTCAAAGTAGAGTTTAAAAATTAAACAAAAAGACATTGCTCCTTTTAAAAGTCCTTT	1950 1970	CTTAAGTTTAGAATACCTCTCTAAGAATTCGTGACAAAAGGCTATGTTCTAATCAATAAG	2010 2030	GAAAAGCTTAAAATTGTTATAAATACTTCCCTTACTTTTAATATAGTGTGCAAAGCAAAC	2070 2090	Figure 3D	
	CCICC	A P	GCTCC1		r G	TTGGG		П О	GACAT			TCACCA		ATTTG		AAATT		TCTAAC		TAAAT			
н	ATT	>	GTG		Д	JCCC		O	CAA			TGC		\TGT.		TAA		CTC		TTA			
×	GTAC	×	GAAG		Q	CCA		H	TCAC			ACCI		IGA2		AGTJ		ATAC		ATTG			
×	CTG	വ	CTC	0	×	CTA	0	⊣	AAC	0		ATA	0	'GTG'	0	TAG	0	AGA	0	AAA	0		
দ	CTTC 1570	Ц	CCI	1630	ഗ	CAG	1690	Ø	ggg	1750	*	ATA	1810	ACT	1870	AAG	1930	TLL	1990	CTT	2050		
ט	TCTG	ద	GICG		>	TGGI		Ø	CAGC		П	ATTI		ACAA		GTCA		TAAG		AAAG			
>	TG.	ß	GA(Σ	AA,		Д	ŭ		Д	AG,		^{1}C		GT		CI		GA.			

GAP WEIGHT: 3.000 LENGTH WEIGHT: 0.100 QUALITY: 856.2 RATIO: 1.464 PERCENT SIMILARITY: 97.436 4817, PEP HGT2.PEP AVERAGE MATCH: 0.540 AVERAGE MISMATCH: -0.396 LENGTH: 585 GAPS: 0 PERCENT IDENTITY: 96.068 AUGUST 22, 1990 08:20 **

MASPGSGFWSFGSEDGSGDSENPGTARAWCQVAQKFTGGIGNKLCALLYG DSEKPAESGGSVTSRAATRKVACTCDQKPCSCPKGDVNYALLHATDLLPA
SGFWSFGSEDGSGDSENPGTARAWCQ
SGFWSFGSEDGSGE AESGGSVTSRAATR AESGGSQPPRAAAR . PTLAFLQDVMNILL . LEEILTHCQTTLKY LEEILMHCQTTLKY TYEIAPVFVLLEYV TYEIAPVFVLLEYV TYEIAPVFVLLEYV

Figure 4A

251 MLIARYKMFPEVKEKGMAAVPRLIAFTSEHSHFSLKKGAAALGIGTDSVI 300
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301 LIKCDERGKMIPSDLERRILEVKQKGFVPFLVSATAGTTVYGAFDPLLAV 350
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351 ADICKKYKIWMHVDAAWGGGLLMSRKHKWKLNGVERANSVTWNPHKMMGV 400
401 PLQCSALLVREEGLMQSCNQMHASYLFQQDKHYDLSYDTGDKALQCGRHV 450
401 PLQCSALLVREEGLMQNCNQMHASYLFQQDKHYDLSYDTGDKALQCGRHV 450
451 DVFKLWLMWRAKGTTGFEAHIDKCLELAEYLYNIIKNREGYEMVFDGKPQ 500
451 DVFKLWLMWRAKGTTGFEAHVDKCLELAEYLYNIIKNREGYEMVFDGKPQ 500
501 HTNVCFWFVPPSLRVLEDNEERMSRLSKVAPVIKARMMEYGTTMVSYQPL 550
551 GDKVNFFRMVISNPAATHQDIDFLIEEIERLGQDL 585

Figure 4B





